

FIG. 1

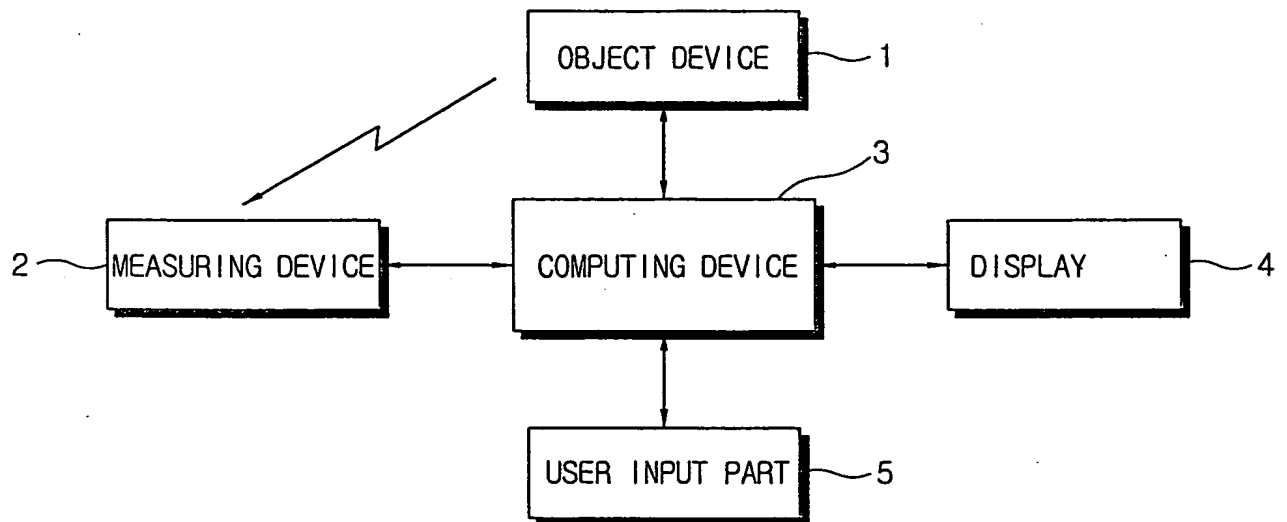


FIG. 2

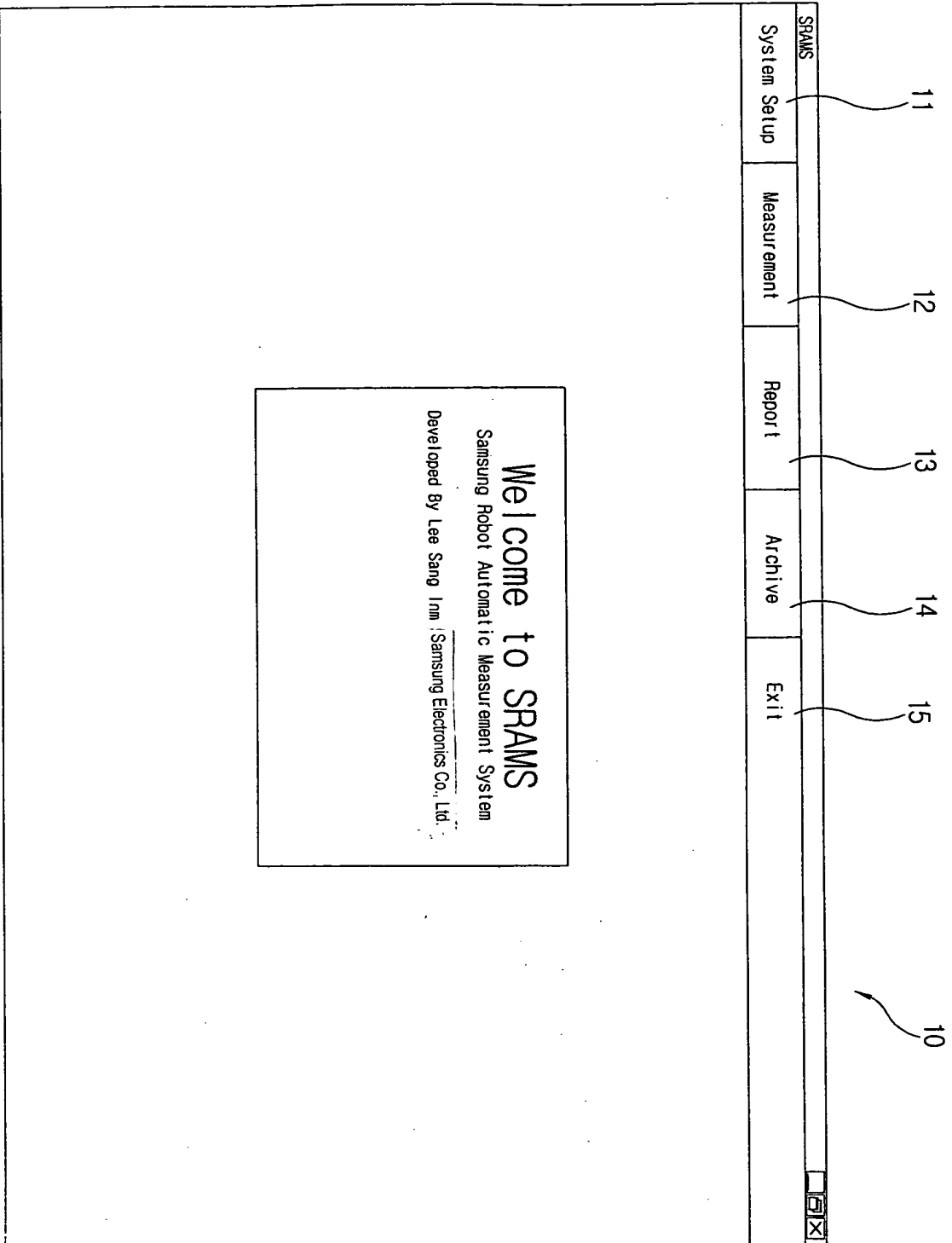
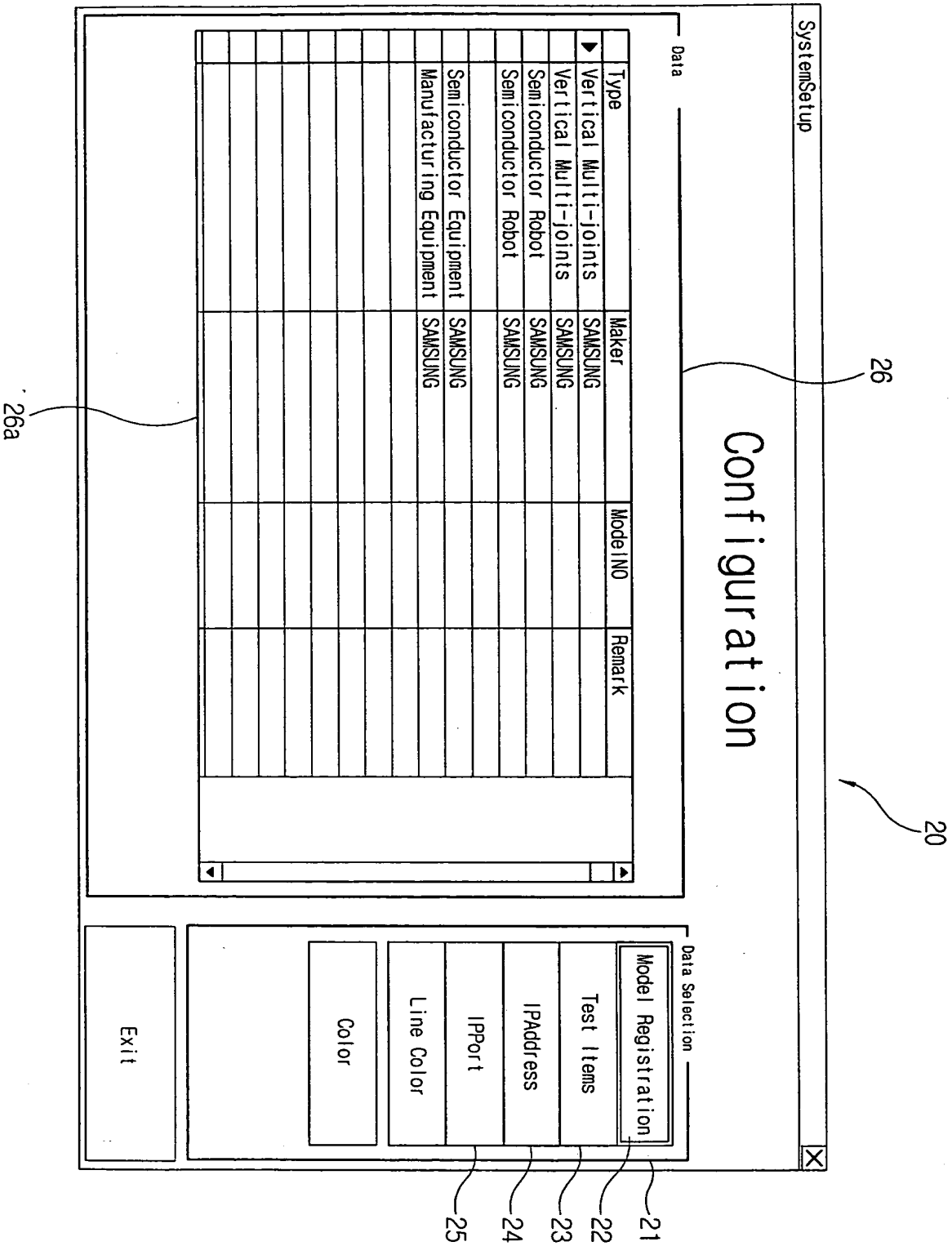


FIG. 3



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FIG. 4

20

SystemSetup

Configuration

Data

TestName	ProaName	ount	Refer Name
Point			
Reference			
Pose Accuracy and Repeatability			
Multi-directional pose accuracy			
Distance acc. and repeatability			
Pose stabilization and overshoot			
path acc. repeat. velo. fluctuation			
Circular acc. & repeat. (Big)			
Circular acc. & repeat. (Small)			
Path accuracy on reorientation			
cornering deviation(Rectangular)			
Minimum posing time			
Drift of pose			
Exchangeability			
Static compliance			
Weaving deviations			

26b

Data Selection

Model Registration

Test Items

IPAddress

IPPort

Line Color

Color

Exit

21

22

23

24

25

FIG. 5

SystemSetup

Configuration

Data

RobotName	IPAddress
XY ROBOT1	

Data Selection

- Model Registration
- Test Items
- IPAddress
- IPort
- Line Color
- Color

Exit

FIG. 6

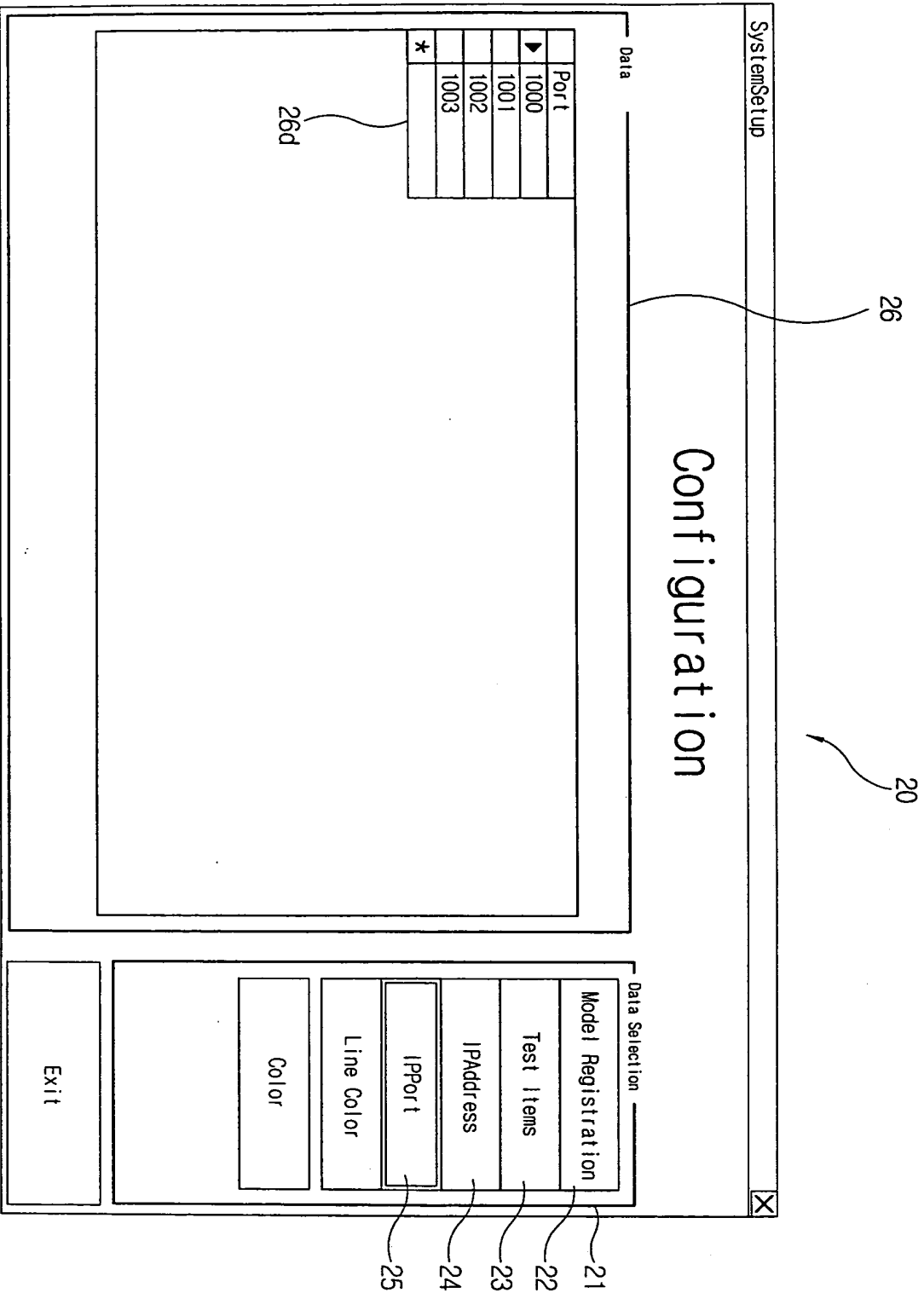


FIG. 7

Robot & Equip. Test Specification

31a 31b 31

33b

30

35

Robot Selection

Semiconductor Robot

RMRL InKLT

Model Register

Limit Setup

1/6

RobotModel

WTR

APHigh

APLow

RPHigh

RPLow

Test Selection

Pose/Acc

Multi-Direction

Dist Acc

OverShoot

Drift

Exchange

PathLine

Path Reorient

Cornering

Path Velocity

Minimum

Static

Weaving

Default Value

0.1

Add New

Update

Delete

Exit

	RobotModel	APHigh	APLow	RPHigh	APLow
1	WTR	0.1	-0.1	0.1	-0.1
2	SS2	0.05	-0.05	0.05	-0.05
3	RMRL InKLT	0.1	-0.1	0.1	-0.1
4	AM1	0.1	-0.1	0.1	-0.1
5	RMRL InKLT	0.1	-0.1	0.1	-0.1
6	AM2	0.1	-0.1	0.1	-0.1

33a

33

FIG. 8

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## Measurement Setup

Setup

Type	Semiconductor Equipment	41a
Measuring Object Model	CleanConve	41b
Body Serial No	Test1	41
Controller Serial No	Test1	
Main S/W Version	4.3	41c
Secondary S/W Version	6.0	
Tester	Lee Sang In	

Directory

c:[Local disk] \*.Notice:Empty the directory

C:\

FARO

Final3.23

Rocal0332

data

Doc

image

Command

C:\FARO\final3.23\Rocal0332

Directory:

New Directory Back Continue...

43



FIG. 9

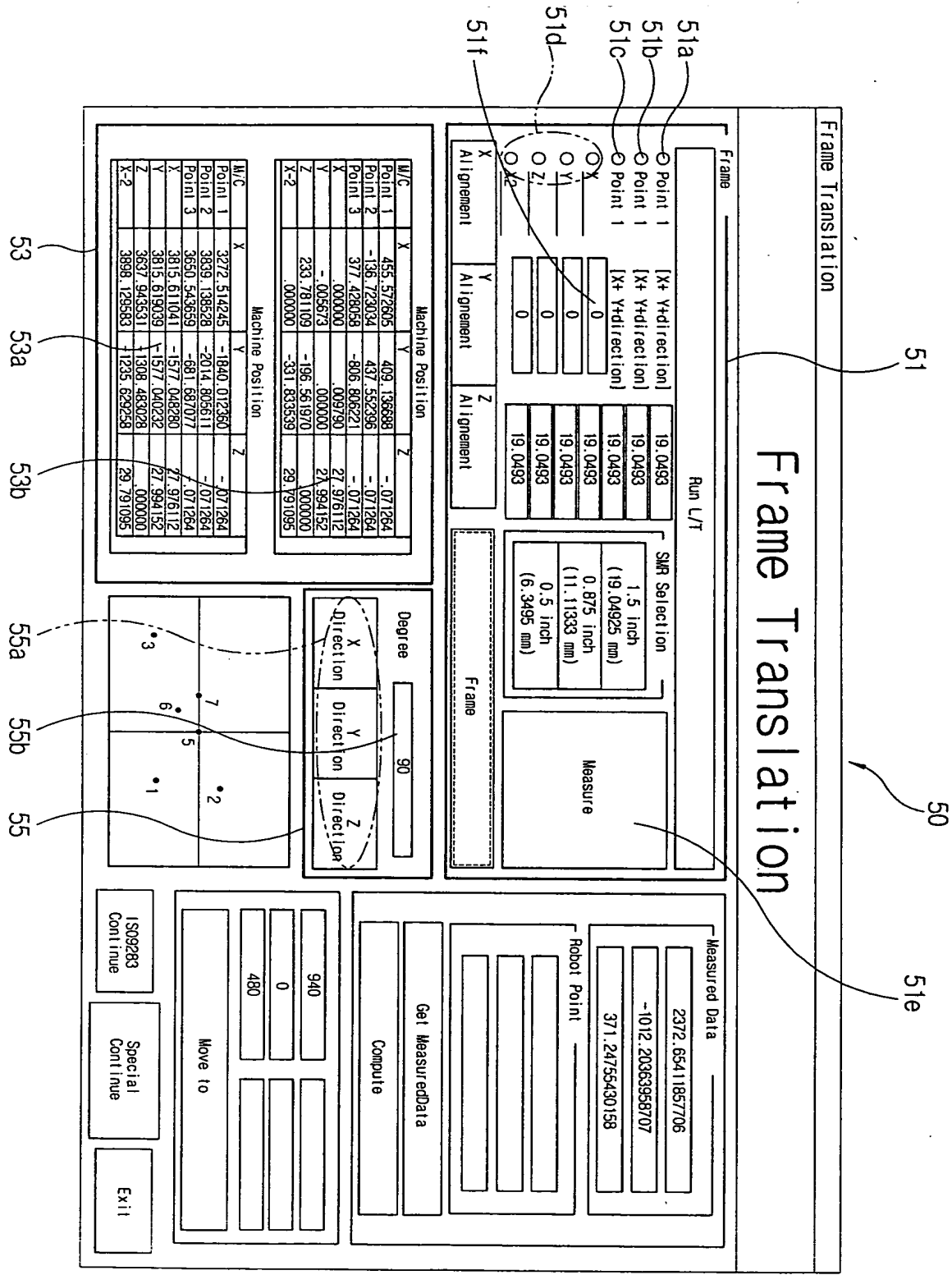


FIG. 10

SRMS - Robot Control

65a

65

60

# Special Measurement

RS232C

LAN

NoComm

Port  
COM 1 ▼

Band Rate  
19200 ▼

Connect

Disconnect

61

Configuration

Robot

Speed  
50% ▼

CP Speed

Load  
100% ▼

63

63a

Commands

Send

Insert

Delete

Clear

Measurement

Test Selection

☒ Point

☒ Reference

☒ Pose Accuracy and Repeatability

☒ Multi-directional pose accuracy

☒ Distance acc. and repeatability

☒ Pose stabilization and overshoot

☒ Path acc. repeat. velo. fluctuation

☒ Circular acc. repeat (Big)

☒ Circular acc. repeat (Small)

☒ Path accuracy on reorientation

☒ Cornering deviation(Regular)

☒ Minimum posing time

☒ Drift of pose

☒ Exchangeability

☒ Static compliance

☒ Weaving deviations

No Ref

Cycle

1

2

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100

Auto

Start

Stop

Reset

Select All

Clear All

Measurement

Measure Count

Laser Tracker

Special Configuration

Don't click the Buttons While measuring.

Load L/T

Initialize

Home

EXIT L/T

Exit

FIG. 11

70

73

Robot Coordinate Translation
Pose accuracy and pose repeatability
Multi-directional pose accuracy variation
Distance acc. & Repeatability
Position Stabilization Time & Overshoot
Drift of pose Characteristics
Exchangeability
Path acc. & repeatability(Line)
Path velocity characteristics
Path acc. & repeatability(Circle)
Path acc. & repeatability(SCircle)
Path accuracy on reorientation
Corneration Deviations
Minimum posing time
Weaving Deviations
Static Compliance
Measured Data
Extra Controls
Exit

# Report

71

FIG. 12

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81

SEROMS									
Robot Coordinate Translation									
Pose accuracy and pose repeatability									
Multi-directional pose accuracy variation									
Distance acc. & Repeatability									
Position Stabilization Time & Overshoot									
Drift of pose Characteristics									
Exchangeability									
Path acc. & repeatability(Line)									
Path velocity characteristics									
Path acc. & repeatability(Circle)									
Path acc. & repeatability(Square)									
Path accuracy on reorientation									
Corneration Deviations									
Minimum posing time									
Static Compliance									
Weaving deviations									
Measured Data									
Exit									

Pose Accuracy			
Point Graph	Line Graph	Distribution Graph	
Point No. 5	Points <input checked="" type="radio"/> All Points <input type="radio"/> Points 1 <input type="radio"/> Points 2 <input type="radio"/> Points 3 <input type="radio"/> Points 4 <input type="radio"/> Points 5	Cmd. Pose <input type="text"/> <input type="text"/> <input type="text"/>	NewData XY Plane YZ Plane ZX Plane Zoom <input type="checkbox"/> Horizontal <input type="checkbox"/> Vertical Zoom In Zoom Out Report Print Direction 
Pose Acc. APx	APy	APz	AP
Directory    Reference    Command Shift    Measurement Configuration			

83

83a

83b

## FIG. 13

### Robot Performance Measurement [ISO 9283]

#### [ Exchangeability ]

Date : 2003-04-07

#### 1. Measurement Information

a. Type	:	j. Quality	4.0
b. Model	:	k. DPMO	6209.7
c. Manufacturer	: Samsung	l. Result	PASS
d. Robot Serial Number	:		
e. Main Software Version	:		
f. BSC Software Version	:		
g. Measurement System	:		
h. Measured Date	: 2003/04/06 22:09:51		
i. Operator	: Lee, S. I		

#### 2. Measurement Result

P1[E]	R1	R2	R3	R4	R5	비고
R1	-	0.016	0.013	0.004	0.008	
R2	-	-	0.026	0.018	0.007	
R3	-	-	-	0.010	0.020	
R4	-	-	-	-	0.011	
R5	-	-	-	-	-	

a. Load	: 100 %
b. Override Speed	: 100 %
c. CP Speed	: 500 mm/sec
d. Specified Limit	: E Low : -Q11 E High : Q12
e. Number of Poses	: 5
f. Measurement Cycle	: 10
g. Measurement Frequency	: 500 Hz

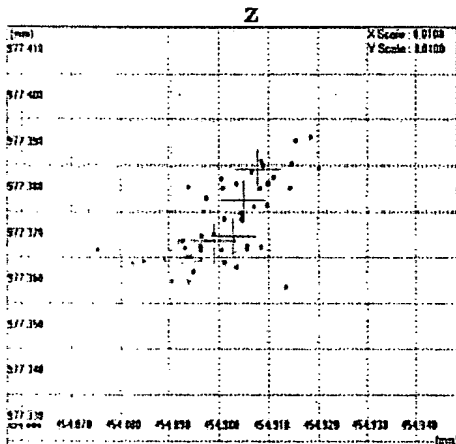
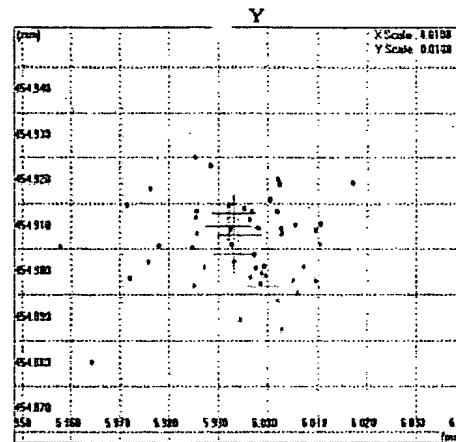
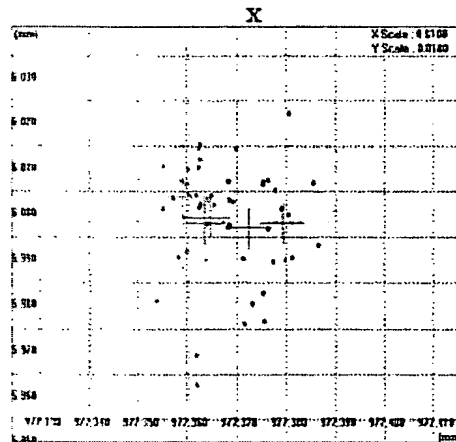
#### 3. Additional Notes

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FIG. 14

Robot Performance Measurement [ISO 9283]

Exchangeability P1



Additional Notes

FIG. 15

